

# Unit 3: International Economics

## 3.1a Reasons for trade

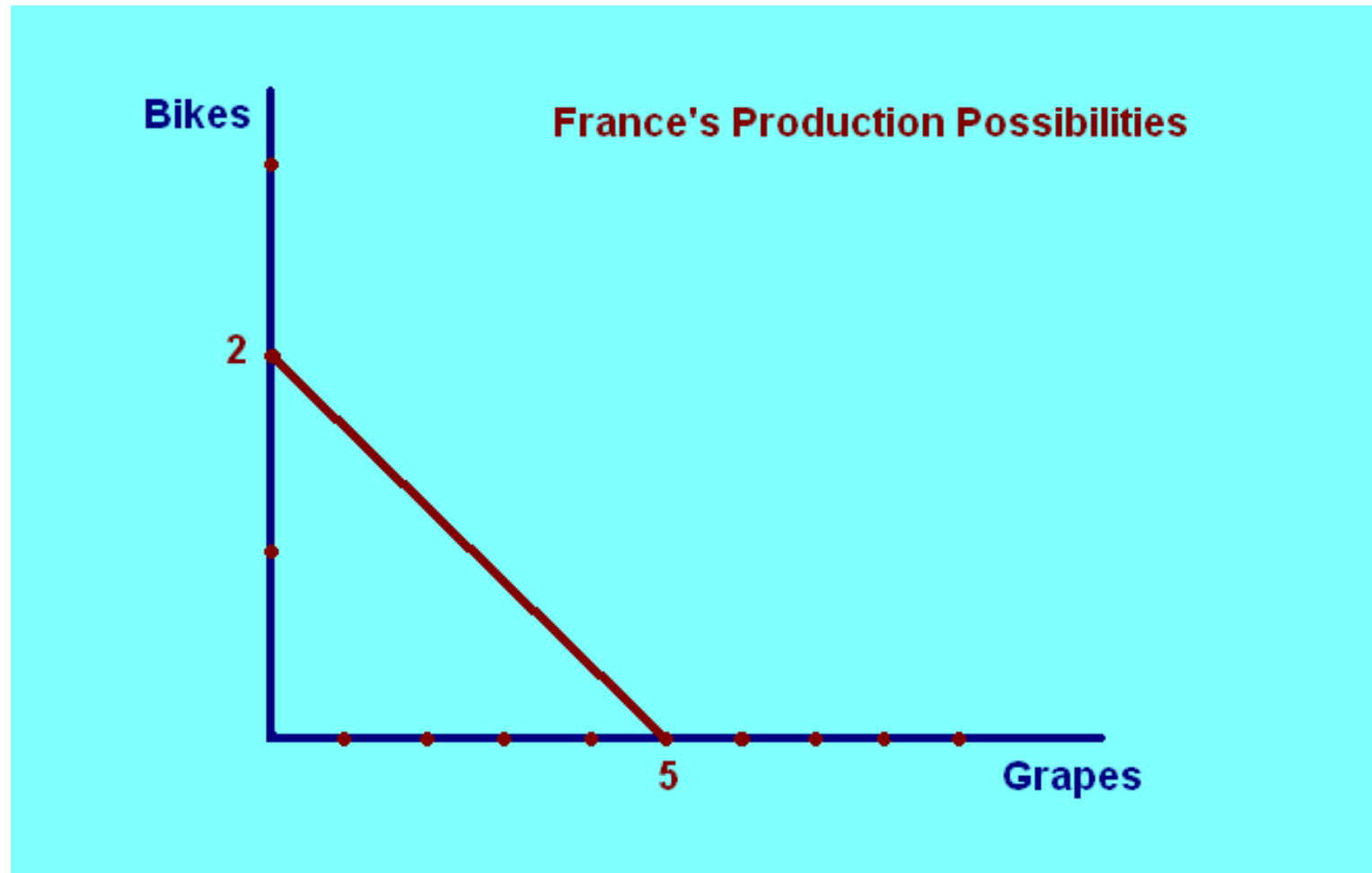
- Trade between countries is often the only way for people to enjoy certain products. People living in a cold climate for instance would have a hard time growing their own bananas or oranges.

- *Factor endowment* refers to *factors of production* that are available in a given place. It is the reason that some countries can produce certain goods at a lower cost than other countries.
- An abundance of arable land might give farmers the ability to produce food at low cost compared to a country that had an abundance of technology and not much land.

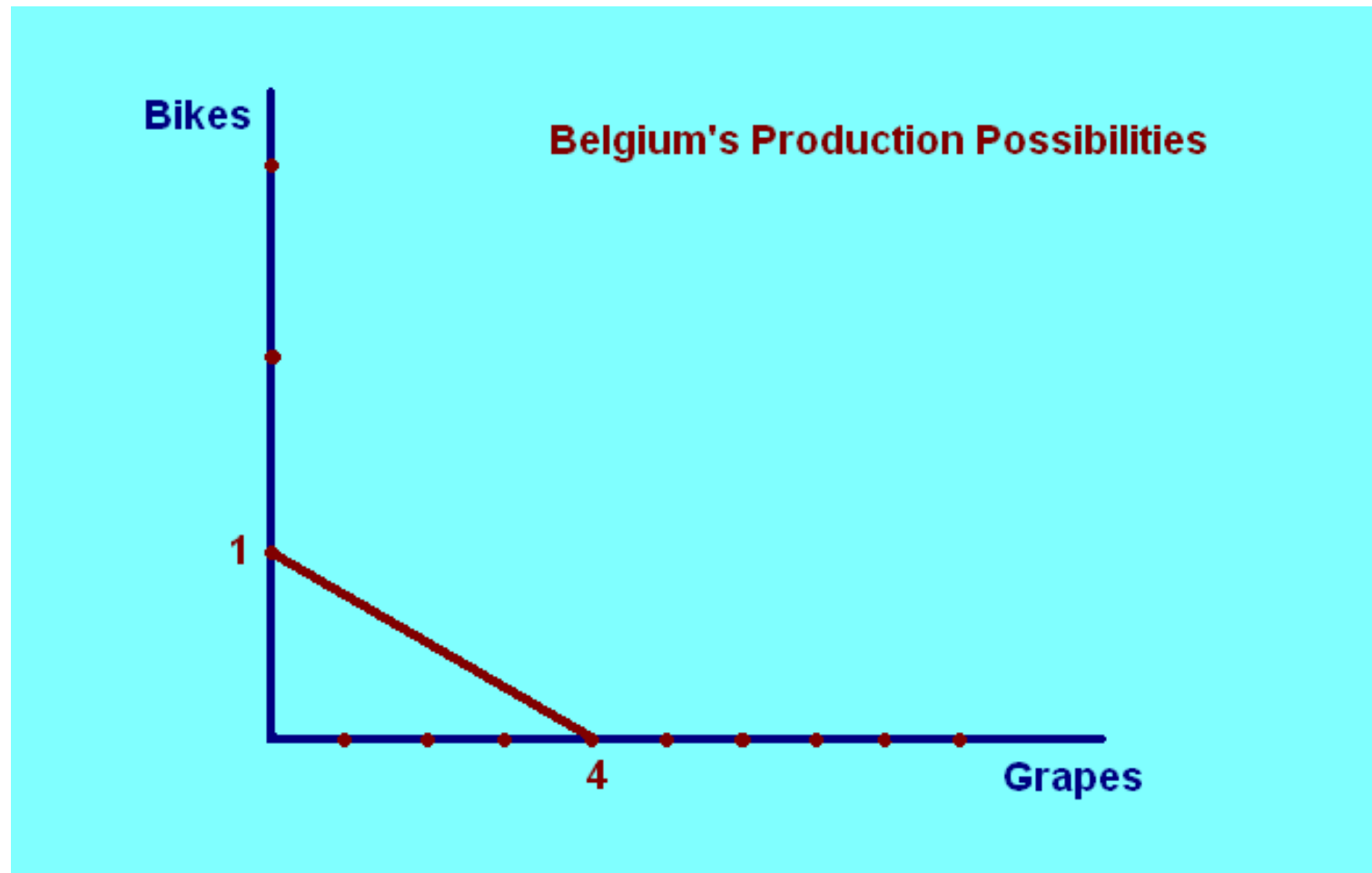
- It would make sense for the first country to produce and trade food products to the second in exchange for computers or mobile phones.
- The *Principle of Comparative Advantage* explains how countries can benefit from free trade, because free trade allows countries to specialize in the production of goods they produce best.

- When a country can produce a good more cheaply than another, they have *absolute advantage* in the production of that good.
- If a farmer in France can produce 5 kilos of grapes for each hour of work and a farmer in Belgium can produce 4 kilos with the same amount of work, the French have *absolute advantage* in grape production.
- *Comparative advantage* describes a relative advantage in production. It is best explained with an example.

Consider that a French worker can produce either 5 kilos of grapes or two bicycles.



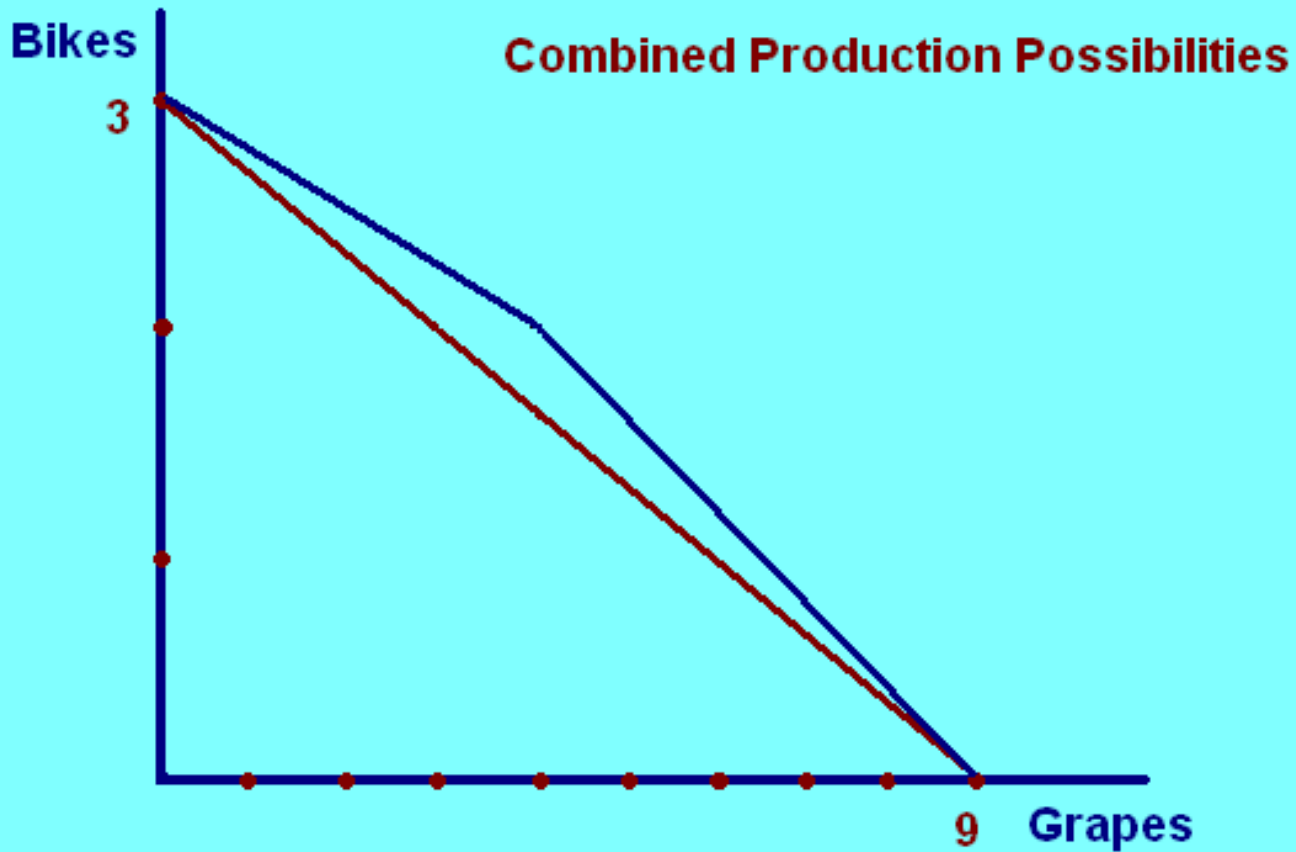
A Belgian worker can produce 4 kilos of grapes or one bicycle.



- In this example, the French have *absolute advantage* in both grapes and bicycles, but they have *comparative advantage* only in bicycles. The Belgians have *comparative advantage* in grapes.
- Their *comparative advantage* can be seen by comparing *opportunity costs*.
- The French give-up two bikes for every five kilos of grape, or  $\frac{2}{5}$  bike per kilo.

- The Belgians give-up one bike for every four kilos of grapes; only  $\frac{1}{4}$  bike per kilo.
- If the French and Belgians decide to trade with one another, it would allow the French to specialize in bicycle production and the Belgians to specialize in grapes.





- The gains from specialization can be seen in the varied slope of the new production possibilities curve.
- At lower levels of grape production, only Belgians will grow grapes and their lower opportunity cost gives the curve a flatter slope.
- If the two countries choose to grow more than 4 kilos of grapes, they must accept the French opportunity cost and the curve becomes steeper.

## 3.1b Free trade and protectionism

- *Free trade* is strictly defined as trade that is free of taxes and restriction. People are free to import and export goods and services between countries.
- In fact, there are few real-world examples of truly free trade. Political considerations prevent policy makers from accepting foreign competition in certain markets.

- Limits to free trade are called *protectionist* because they are usually in place to protect domestic firms from competition.

## **Types of protectionism**

- Tariffs – taxes on imported or exported goods.
- Quotas – a limit to the quantity of goods that can be sold.
- Subsidies – payment to industry for the production of certain goods

- Voluntary Export Restraints (VERs) – by request of a foreign government or company, an agreement to restrict exports to a certain market, usually for a limited time.
- Administrative obstacles – non monetary restrictions on certain imported products, perhaps based on production techniques or production materials.
- Health and safety standards – a type of *administrative obstacle*, but specific to protecting the health and safety of potential consumers.
- Environmental standards – designed to discourage environmental damage in the production of goods for export.

## 3.1c Arguments for protectionism

- An *infant industry* is a relatively underdeveloped industry, unable to compete with imports only because they are not yet advanced enough to enjoy the decrease in costs that could come with further investment or economy of scale.
- One argument for protectionism is that infant industries need time free from competition, reinvesting profits until they are able to compete.

- *Diversification* is another reason given for protectionist policy, people believing it is undesirable to be dependant on only one or two industries for export revenues.
- *Diversification* also is a way to avoid being dependent on other countries for necessary goods.
- The initiation of free trade often endangers parts of a country's labor force. In the short run the specialization that comes with free trade means some workers will need costly training in a new industry.

- This is why *protection of employment* is often given as a reason for protectionist policies.
- Import tariffs, while they limit trade to a degree, also act as a source of government revenue. Policy makers might be unwilling to give-up those revenues if they are vital for supporting certain public programs.

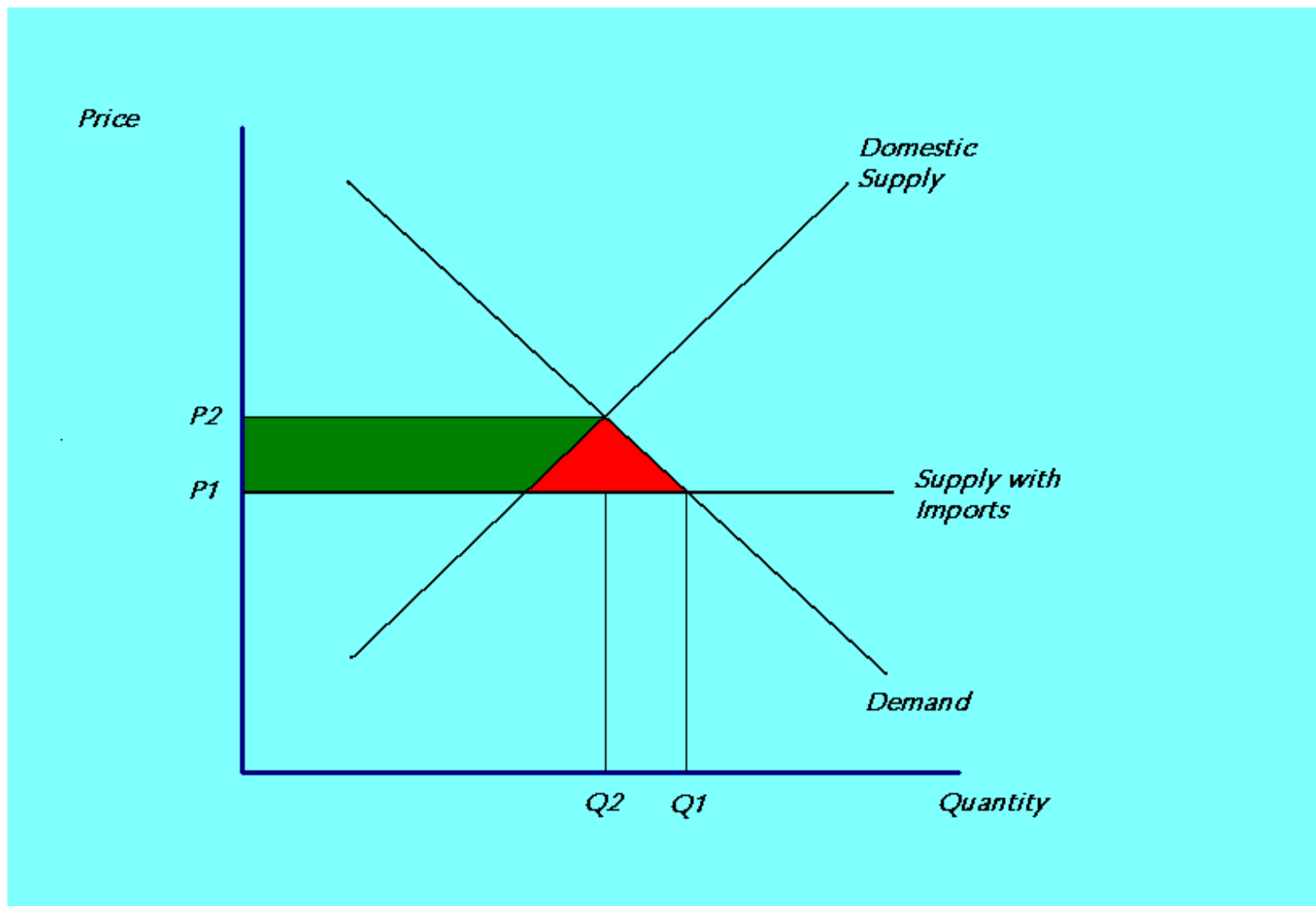


- *Dumping* refers to the practice of selling a good below cost. Companies might be willing to do this for a time as a way to establish their place in the market, perhaps driving other companies out of business.
- This is why *anti-dumping* can also be given a reason for protectionism.

## 3.1d Arguments against protectionism

- The *Principle of Comparative Advantage* (section 3.1a) explains how free trade helps by allowing specialization.
- In contrast to this, protectionist policies encourage resources to be allocated inefficiently by protecting industries that are working at a disadvantage, perhaps because labor—or some other needed resource—are comparatively scarce or expensive.

- As explained in the last section, there are many reasons given for the protection of certain industries, many of them driven by political considerations.
- The cost of protectionism comes in the form of higher prices, draining demand for other goods and reducing potential profits in other industries.

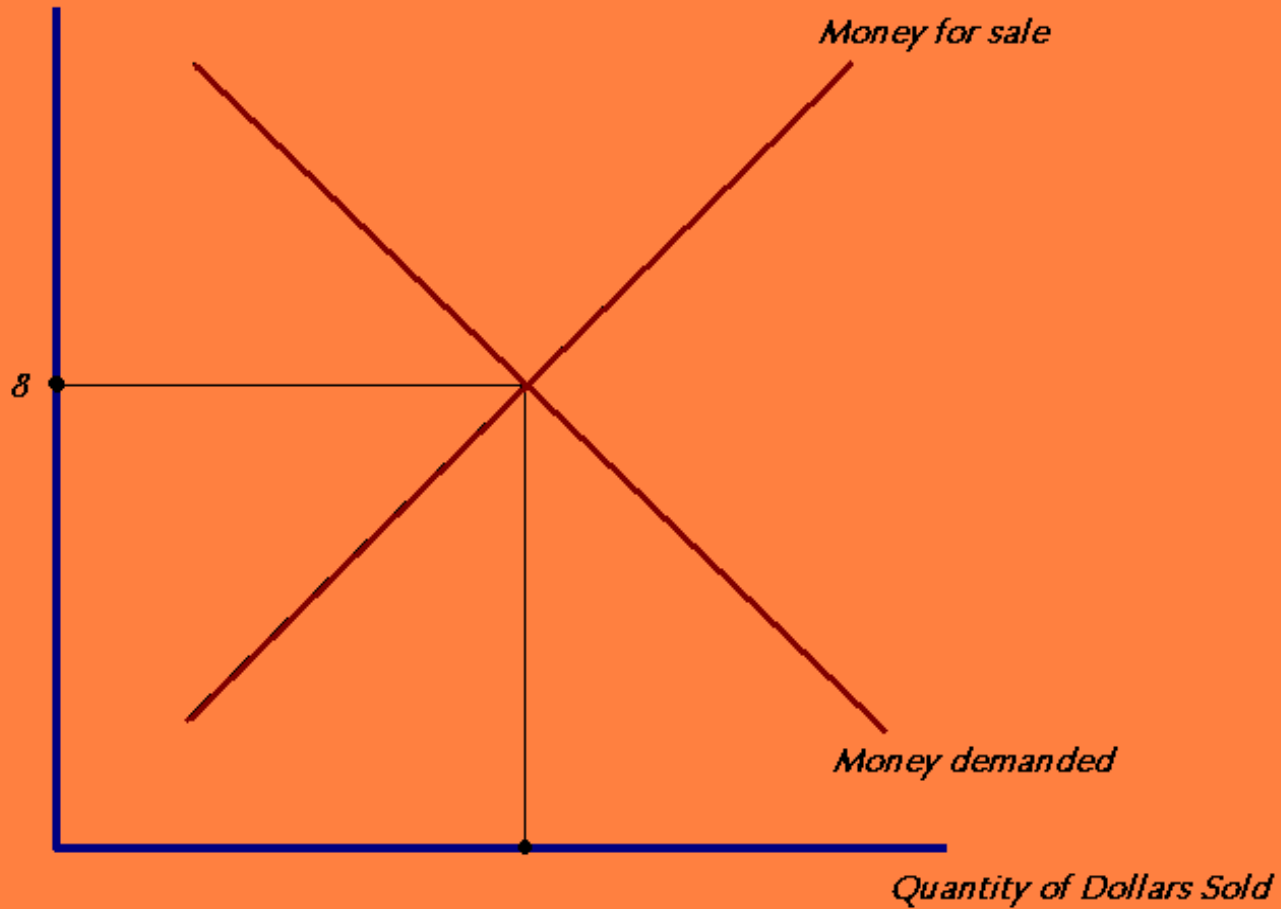


- The graph above displays the gains and losses of protectionist policy. The green area shows the gains for domestic producers when imports are limited.
- The green and red areas together represent the loss to domestic consumers. The red triangle measures the net loss to society.
- Societies can also gain from free trade by allowing new products into markets that were formerly not available to consumers, and new technologies for domestic production that were not before possible.

## 3.2a Floating exchange rates

- *Floating exchange rates* are determined by the market, and subject to the same laws of supply and demand that determine prices for goods in a free market.

*Yuan/Dollar*



As in the graph above, a floating exchange rate is determined by supply and demand for the currency in exchange markets.

Demand for a currency comes from the people who want to invest or buy goods in another country.

For our example, demand of Dollars comes from people holding Yuan—the Chinese—who want to buy American goods and investment targets, stocks or securities.



The supply of Dollars comes from Americans who want to buy things from China.

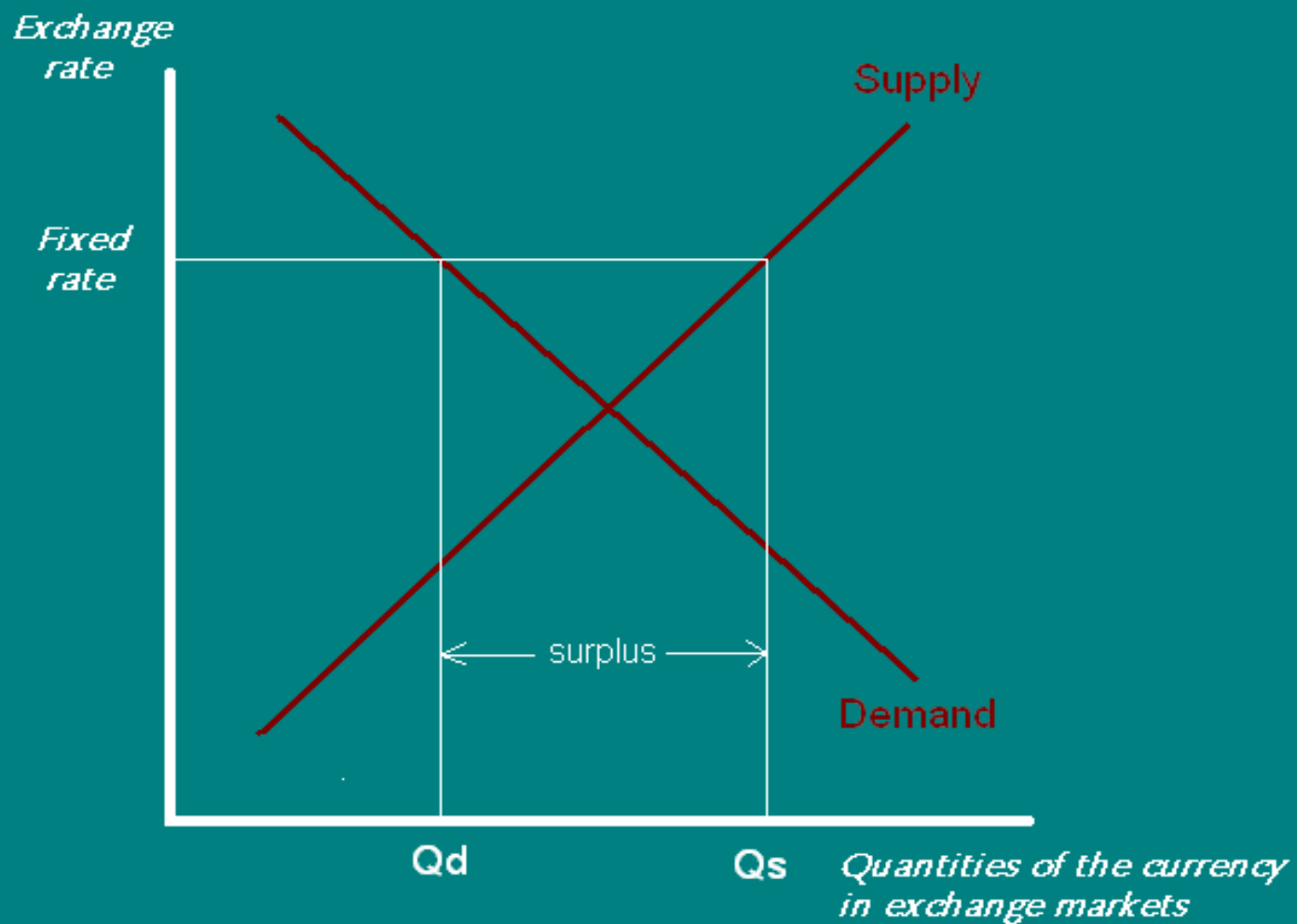
Both supply and demand are also influenced by futures markets, where people will buy a currency to sell it later, with the expectation that the exchange rate will increase.

Fixed exchange rates have sometimes been put in place by countries wishing to exaggerate the value of their currency.

This might be because they wish to buy imported goods at a discount, or maybe as a matter of prestige.

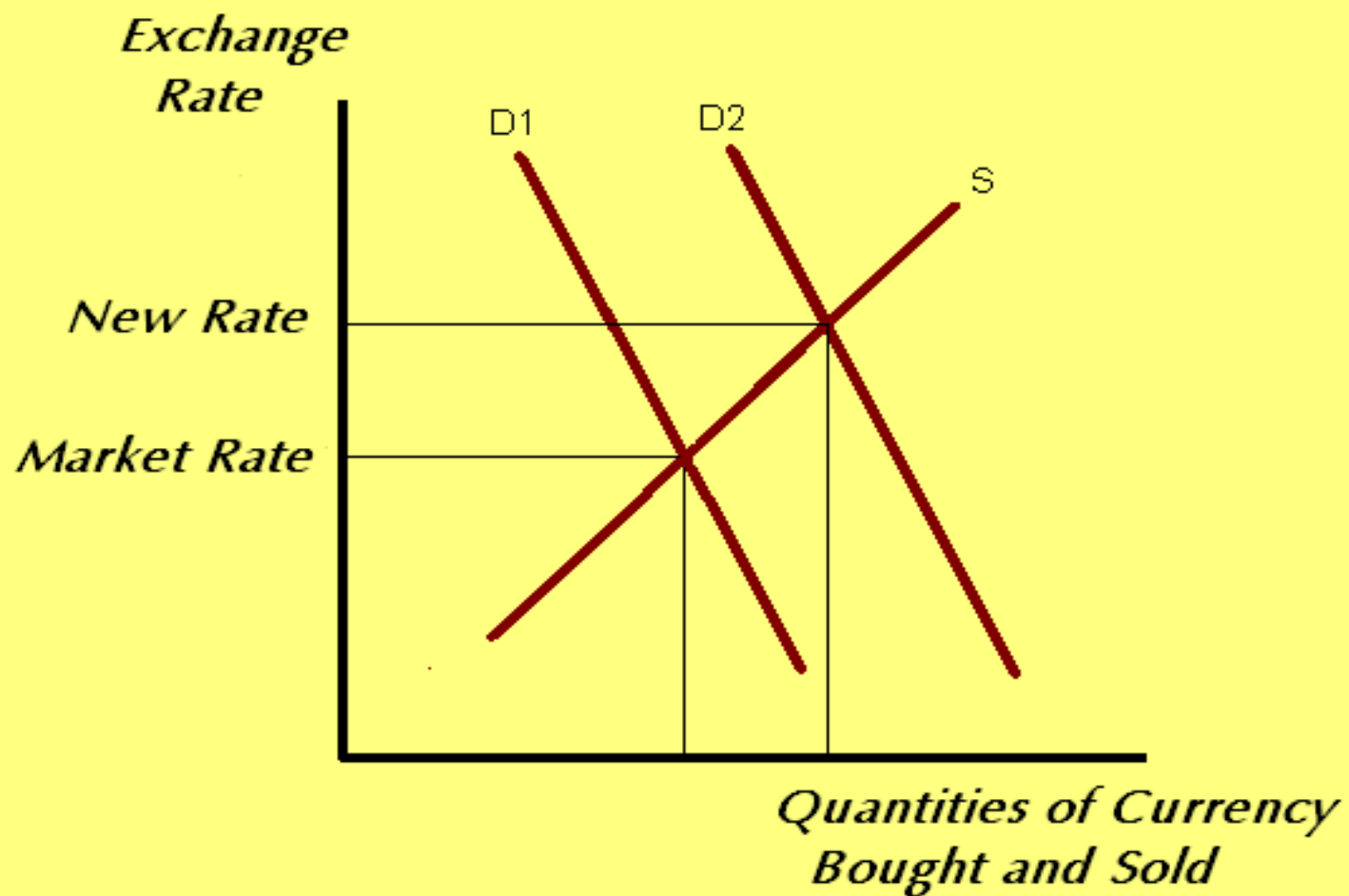
## **3.2b Fixed and managed exchange rates**

Just as with a price floor, minimum exchange rates are difficult to enforce and black markets will almost always develop.



*A managed exchange rate* is more commonly known as a *dirty float*. The currency value is determined by supply and demand in exchange markets, but government buys or sells its own currency to manipulate the equilibrium price.

To increase the value of one's currency, government uses foreign reserves to buy their own currency.

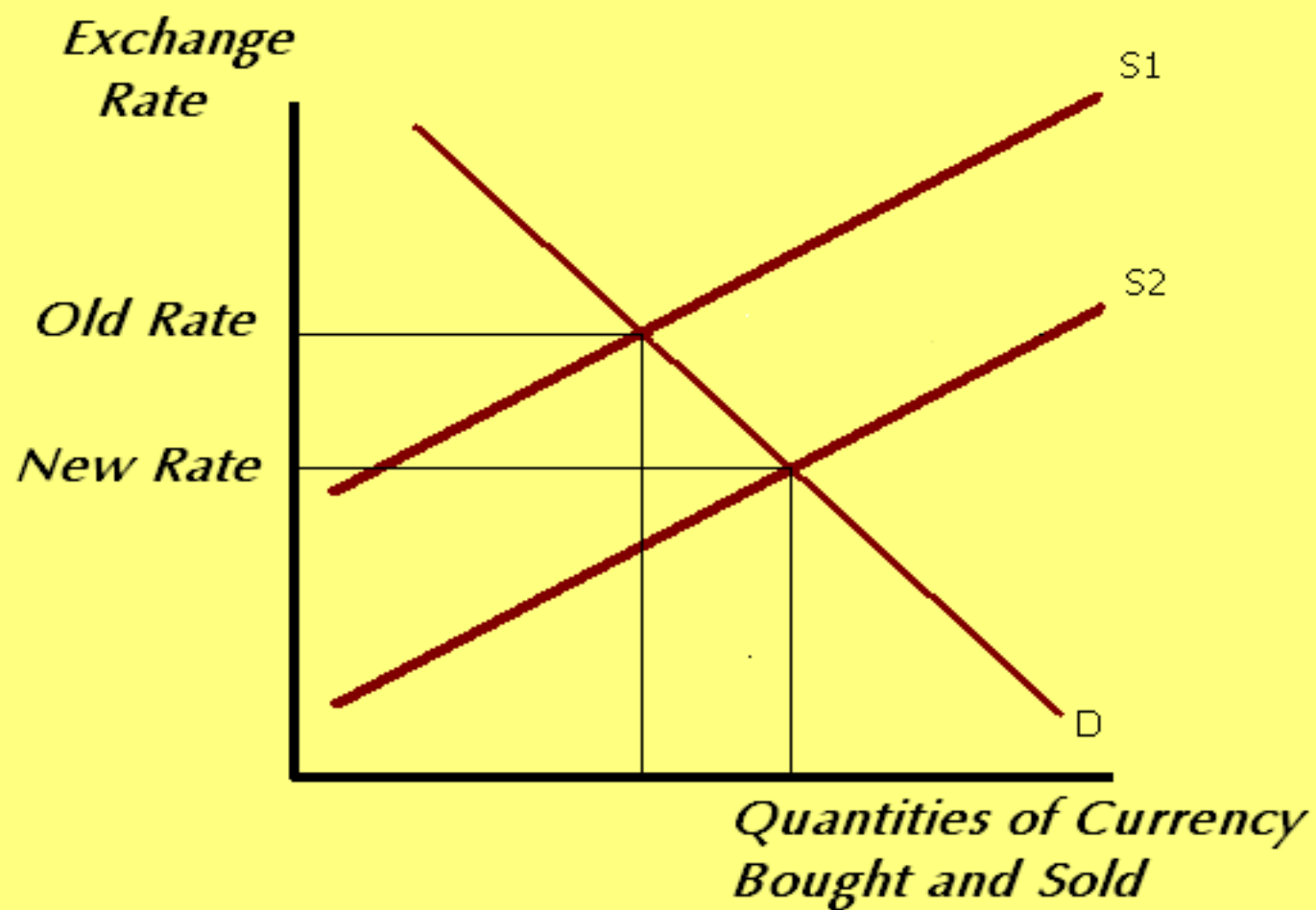


A higher exchange rate means domestic companies will be able to pay less for foreign capital, so it might be desirable for countries that need to increase their capital stock and technology.

An artificially high exchange rate is often difficult to maintain for a long period because of the amount of foreign reserves required.

It is easier—and probably more common--for countries to manage a lower rate for their currency in an effort to encourage exports.





At the lower exchange rate, foreigners will find your exports cheaper to buy, thus encouraging demand for domestic industries.

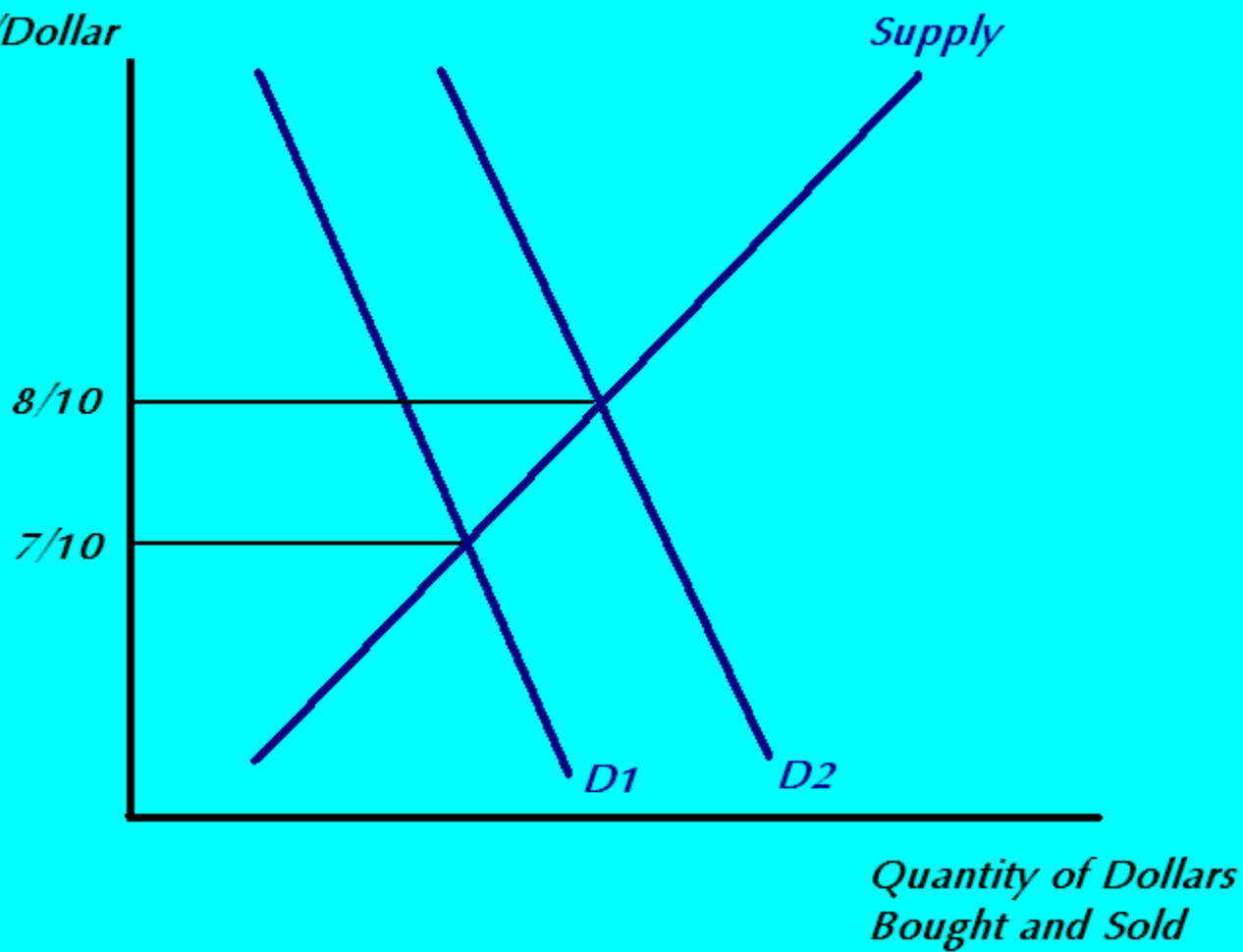
The trade-off is that foreign goods—including foreign capital--will be more expensive for domestic buyers. Domestic firms may find themselves dependent on domestic machinery and technology, which can also inhibit growth.

Exchange rates will also be affected by any increase or decrease in the demand for goods between two countries.

This can happen because of a new product or technology developed in a single country, a change in interest rates, or excessive inflation.

For example, an increase in interest rates in the U.S. will attract more investment spending from Europe—

*Euro/Dollar*



Investors will have to trade their Euros for Dollars and the increased demand for Dollars will increase the exchange rate.

## 3.3 Balance of payments

- Here are the variables that go into the calculation of the *current account balance* (CAB):
- $X$  = Exports of goods and services  
 $M$  = Imports of goods and services
- $CAB = X - M$

Also known as the *balance of payments*, if the CAB is positive, it means that money is owed to the country, and the payment may come in the form of capital expenditures.

The *capital account* measures the balance of investment spending, in and out of a country. This usually comes close to balancing any imbalance in the CAB.

When the CAB, or *balance of payments* is negative, the *capital account* is usually positive, meaning that foreign investment is making up the difference for any trade deficit.



# 3.4 Economic integration

## Globalization

- *Globalization* refers to the general integration of economies and societies around the world.
- *Globalization* has been driven largely by the gradual acceptance of trade reforms. This has encouraged long periods of economic growth in China, India, and other countries, but *globalization* has also been accused of increasing wealth disparities and accelerating environmental damage.

# Trading blocs

- A *free trade area* refers to two or more countries that agree to eliminate *tariffs* and *quotas* on most--or all--*goods* traded between them. An example is the North American Free Trade Agreement (NAFTA).
- Countries will choose this kind of economic integration if their economical structures are complementary. If they are competitive, they will more likely choose a *customs union*.

- A *customs union* is an association organized to eliminate tariffs and quotas on goods exchanged between member nations, but they also agree to a uniform tariff policy toward nonmember nations.
- A *common market* is an economic unit, typically combination of nations, intended to eliminate or markedly reduce trade barriers among its members.
- A *common market* is like a *free trade area* except that the laws and rules governing production are also standardized. As in the European Union, the currency might also be standardized.

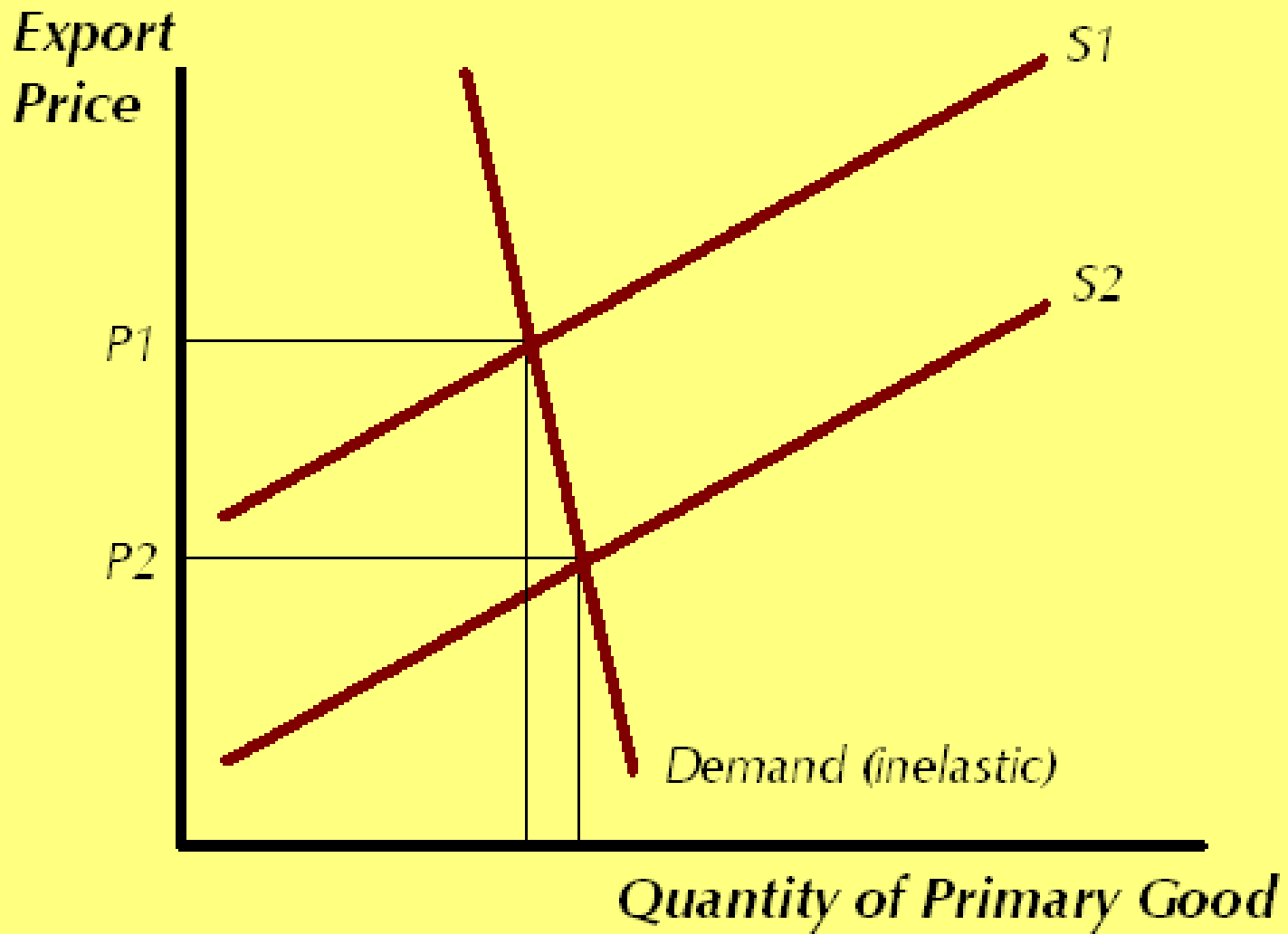
## 3.5 Terms of trade

- *Terms of trade* are a simple ratio of Export Prices and Import Prices.
- $P_x/P_m$
- In itself, *Terms of Trade* is a rather curious measure and does not tell us much. What is of interest is how a country's *Terms of Trade* can change.

For instance, if the price doubles for my country's exports, we can afford twice as many imported goods without affecting the balance of trade.

On the other hand, if my export prices are cut in half, we can only afford half of the imports. If we have grown dependent on those imports, it means we must produce and sell twice as many exports as before, potentially overusing and damaging resources.

This is exactly the problem facing many developing countries that are typically dependent on primary industries for their exports.



Primary goods typically have demand that is inelastic. That means that any increase in supplies will cause a relatively drastic decrease in price.



## 3.6 Purchasing power parity

- *Purchasing power parity* refers to a theory that—with true free trade, absent of tariffs or controls—exchange rates will adjust so that prices will tend to equalize across borders.

The basic argument is this:

If prices are generally cheaper in one country than another, the demand for goods—and for the currency—will be more.

This will increase the value of the currency and increase the foreign price for goods in that country.

The tendency then will be that goods from cheap countries will become more expensive for foreign buyers, and goods from expensive countries will become cheaper.

The trend toward prices becoming generally equal is called *Purchasing Power Parity*.

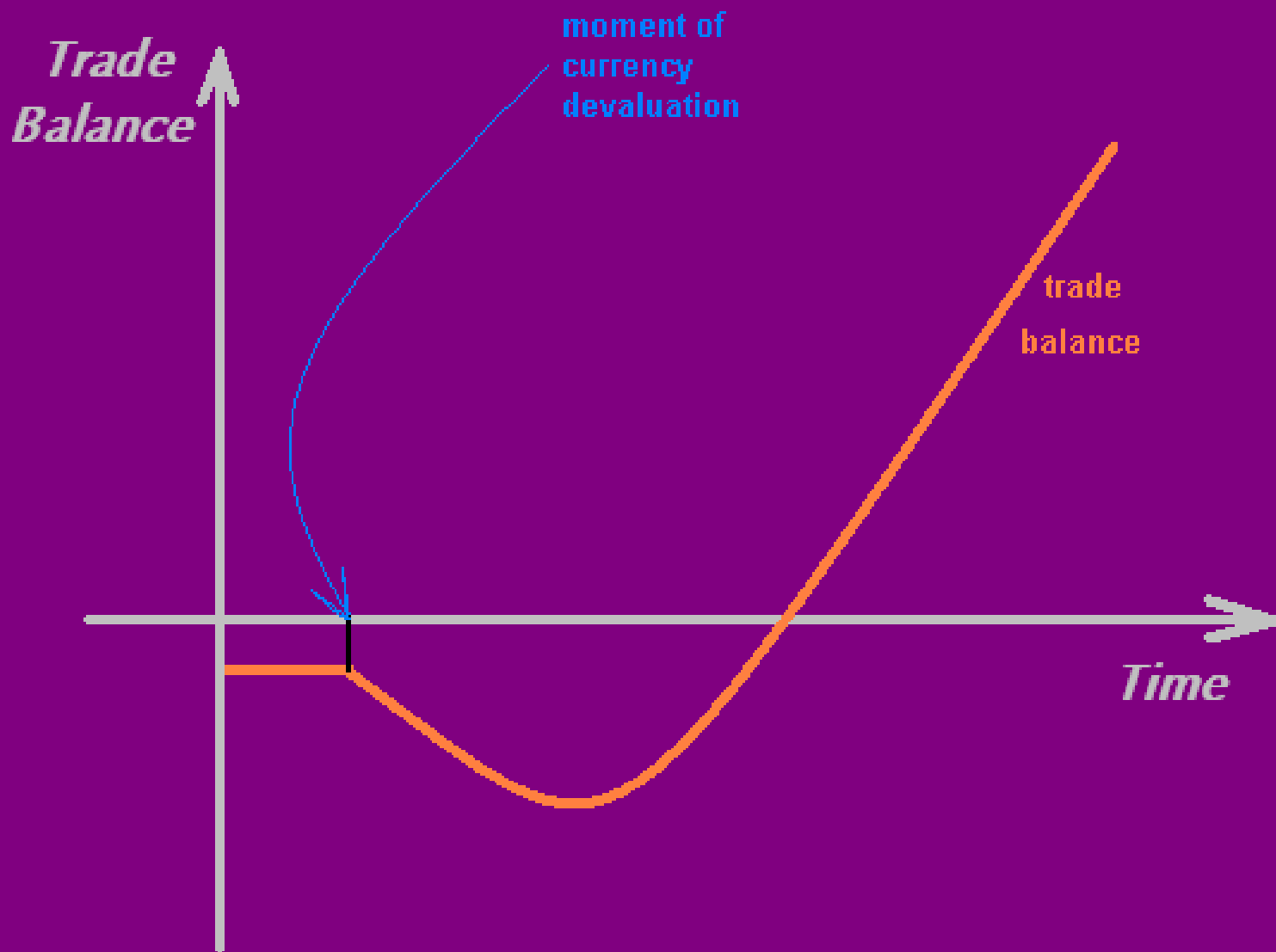
## 3.7 Marshall-Lerner condition and the J-curve

- The *Marshall-Lerner condition* says that, for a currency devaluation to have a positive impact in trade balance, the sum of price elasticity of exports and imports (in absolute value) must be greater than one.

If the trade elasticity is less than one the changes in price will have a greater effect on the trade balance than the change in goods bought and sold.

If the *Marshall-Lerner* condition is met—trade elasticity greater than one—a lower exchange rate will bring—short term—a decline in the trade balance.

Later, when there is time for contracts to be renegotiated, trade balances improve. This delayed effect on trade balances is known as the J-Curve.



The *J-curve* is an observation of how trade balances react to the devaluation of a currency.

Short-term, trade balances will decline because the cost of imports increases.

Firms must buy similar quantities of imports, despite the higher apparent rate, because they are bound to contracts with foreign sellers.



Long-term, trade balances increase as firms are able to adjust their contracts, buying fewer imports and selling more exports.